

Benedicte Vanwanseele

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5343320/publications.pdf>

Version: 2024-02-01

132
papers

3,326
citations

196777

29
h-index

198040

52
g-index

137
all docs

137
docs citations

137
times ranked

3768
citing authors

#	ARTICLE	IF	CITATIONS
1	Strength training for treatment of osteoarthritis of the knee: A systematic review. <i>Arthritis and Rheumatism</i> , 2008, 59, 1488-1494.	6.7	225
2	The association of external knee adduction moment with biomechanical variables in osteoarthritis: A systematic review. <i>Knee</i> , 2009, 16, 303-309.	0.8	200
3	The effects of immobilization on the characteristics of articular cartilage: current concepts and future directions. <i>Osteoarthritis and Cartilage</i> , 2002, 10, 408-419.	0.6	189
4	Knee cartilage of spinal cord-injured patients displays progressive thinning in the absence of normal joint loading and movement. <i>Arthritis and Rheumatism</i> , 2002, 46, 2073-2078.	6.7	165
5	Longitudinal analysis of cartilage atrophy in the knees of patients with spinal cord injury. <i>Arthritis and Rheumatism</i> , 2003, 48, 3377-3381.	6.7	127
6	A review on the mechanical quality of articular cartilage – Implications for the diagnosis of osteoarthritis. <i>Clinical Biomechanics</i> , 2006, 21, 999-1012.	0.5	110
7	Lower limb muscle strengthening does not change frontal plane moments in women with knee osteoarthritis: A randomized controlled trial. <i>Clinical Biomechanics</i> , 2011, 26, 167-174.	0.5	92
8	Effect of children's shoes on gait: a systematic review and meta-analysis. <i>Journal of Foot and Ankle Research</i> , 2011, 4, 3.	0.7	92
9	Knee Joint Loading in Healthy Adults During Functional Exercises: Implications for Rehabilitation Guidelines. <i>Journal of Orthopaedic and Sports Physical Therapy</i> , 2018, 48, 162-173.	1.7	71
10	Wireless Tri-Axial Trunk Accelerometry Detects Deviations in Dynamic Center of Mass Motion Due to Running-Induced Fatigue. <i>PLoS ONE</i> , 2015, 10, e0141957.	1.1	66
11	Resistive Exercise for Arthritic Cartilage Health (REACH): A randomized double-blind, sham-exercise controlled trial. <i>BMC Geriatrics</i> , 2009, 9, 1.	1.1	64
12	Long-term changes in the tibia and radius bone mineral density following spinal cord injury. <i>Spinal Cord</i> , 2005, 43, 96-101.	0.9	61
13	Degenerative meniscus tears and mobility impairment in women with knee osteoarthritis. <i>Osteoarthritis and Cartilage</i> , 2007, 15, 701-708.	0.6	59
14	The relationship between knee adduction moment and cartilage and meniscus morphology in women with osteoarthritis. <i>Osteoarthritis and Cartilage</i> , 2010, 18, 894-901.	0.6	56
15	Individual selection of gait retraining strategies is essential to optimally reduce medial knee load during gait. <i>Clinical Biomechanics</i> , 2014, 29, 828-834.	0.5	55
16	Novice runners show greater changes in kinematics with fatigue compared with competitive runners. <i>Sports Biomechanics</i> , 2018, 17, 350-360.	0.8	54
17	Comparison of foot muscle morphology and foot kinematics between recreational runners with normal feet and with asymptomatic over-pronated feet. <i>Gait and Posture</i> , 2017, 54, 290-294.	0.6	49
18	Posterior cruciate ligament deficiency: Biomechanical and biological consequences and the outcomes of conservative treatment. <i>Journal of Science and Medicine in Sport</i> , 2008, 11, 433-443.	0.6	47

#	ARTICLE	IF	CITATIONS
19	Influence of outdoor running fatigue and medial tibial stress syndrome on accelerometer-based loading and stability. <i>Gait and Posture</i> , 2018, 59, 222-228.	0.6	47
20	Frontal Knee Alignment: Three-dimensional Marker Positions and Clinical Assessment. <i>Clinical Orthopaedics and Related Research</i> , 2009, 467, 504-509.	0.7	46
21	Concurrent validity and reliability of wireless instrumented insoles measuring postural balance and temporal gait parameters. <i>Gait and Posture</i> , 2017, 51, 116-124.	0.6	46
22	Knee Cartilage Thickness, T1 ρ and T2 Relaxation Time Are Related to Articular Cartilage Loading in Healthy Adults. <i>PLoS ONE</i> , 2017, 12, e0170002.	1.1	46
23	Progressive resistance training and dynamic alignment in osteoarthritis: A single-blind randomised controlled trial. <i>Clinical Biomechanics</i> , 2011, 26, 71-77.	0.5	44
24	The effect of three surface conditions, speed and running experience on vertical acceleration of the tibia during running. <i>Sports Biomechanics</i> , 2017, 16, 166-176.	0.8	43
25	Dynamic alignment and its association with knee adduction moment in medial knee osteoarthritis. <i>Knee</i> , 2010, 17, 210-216.	0.8	41
26	Post-traumatic glenohumeral cartilage lesions: a systematic review. <i>BMC Musculoskeletal Disorders</i> , 2008, 9, 107.	0.8	40
27	Surface effects on dynamic stability and loading during outdoor running using wireless trunk accelerometry. <i>Gait and Posture</i> , 2016, 48, 220-225.	0.6	38
28	Lateral trunk lean and medializing the knee as gait strategies for knee osteoarthritis. <i>Gait and Posture</i> , 2017, 51, 247-253.	0.6	35
29	Effect of thong style flip-flops on children's barefoot walking and jogging kinematics. <i>Journal of Foot and Ankle Research</i> , 2013, 6, 8.	0.7	33
30	Age-Related Changes in Achilles Tendon Stiffness and Impact on Functional Activities: A Systematic Review and Meta-Analysis. <i>Journal of Aging and Physical Activity</i> , 2019, 27, 116-127.	0.5	33
31	Gait adaptations of older adults on an uneven brick surface can be predicted by age-related physiological changes in strength. <i>Gait and Posture</i> , 2018, 61, 257-262.	0.6	32
32	Novel technology in sports biomechanics: some words of caution. <i>Sports Biomechanics</i> , 2021, , 1-9.	0.8	32
33	Machine learning algorithms can classify outdoor terrain types during running using accelerometry data. <i>Gait and Posture</i> , 2019, 74, 176-181.	0.6	30
34	A Machine Learning Approach to Estimate Hip and Knee Joint Loading Using a Mobile Phone-Embedded IMU. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 320.	2.0	29
35	Foot muscle morphology is related to center of pressure sway and control mechanisms during single-leg standing. <i>Gait and Posture</i> , 2017, 57, 52-56.	0.6	27
36	Fatigue Prediction in Outdoor Runners Via Machine Learning and Sensor Fusion. , 2018, , .		27

#	ARTICLE	IF	CITATIONS
37	The influence of knee joint geometry and alignment on the tibiofemoral load distribution: A computational study. <i>Knee</i> , 2019, 26, 813-823.	0.8	27
38	Recommendations for statistical analysis involving null hypothesis significance testing. <i>Sports Biomechanics</i> , 2020, 19, 561-568.	0.8	27
39	Test-retest reliability of knee extensor rate of velocity and power development in older adults using the isotonic mode on a Biodex System 3 dynamometer. <i>PLoS ONE</i> , 2018, 13, e0196838.	1.1	26
40	The effect of external ankle support on knee and ankle joint movement and loading in netball players. <i>Journal of Science and Medicine in Sport</i> , 2014, 17, 511-515.	0.6	25
41	Proactive and reactive neuromuscular control in subjects with chronic ankle instability: Evidence from a pilot study on landing. <i>Gait and Posture</i> , 2015, 41, 106-111.	0.6	25
42	Effect of habitual foot-strike pattern on the gastrocnemius medialis muscle-tendon interaction and muscle force production during running. <i>Journal of Applied Physiology</i> , 2019, 126, 708-716.	1.2	24
43	Measuring Lifting Forces in Rock Climbing: Effect of Hold Size and Fingertip Structure. <i>Journal of Applied Biomechanics</i> , 2011, 27, 40-46.	0.3	23
44	Musculoskeletal modelling in dogs: challenges and future perspectives. <i>Veterinary and Comparative Orthopaedics and Traumatology</i> , 2016, 29, 181-187.	0.2	22
45	Musculotendon excursion potential, tendon slack and muscle fibre length: the interaction of the canine gastrocnemius muscle and tendon. <i>Journal of Anatomy</i> , 2018, 233, 460-467.	0.9	22
46	Optimal mechanical force-velocity profile for sprint acceleration performance. <i>Scandinavian Journal of Medicine and Science in Sports</i> , 2022, 32, 559-575.	1.3	22
47	Data fusion of body-worn accelerometers and heart rate to predict VO ₂ max during submaximal running. <i>PLoS ONE</i> , 2018, 13, e0199509.	1.1	21
48	Bilateral differences in muscle fascicle architecture are not related to the preferred leg in jumping athletes. <i>European Journal of Applied Physiology</i> , 2017, 117, 1453-1461.	1.2	20
49	Differences in foot muscle morphology and foot kinematics between symptomatic and asymptomatic pronated feet. <i>Scandinavian Journal of Medicine and Science in Sports</i> , 2019, 29, 1766-1773.	1.3	20
50	Distal-to-proximal joint mechanics redistribution is a main contributor to reduced walking economy in older adults. <i>Scandinavian Journal of Medicine and Science in Sports</i> , 2021, 31, 1036-1047.	1.3	19
51	In-shoe multi-segment foot kinematics of children during the propulsive phase of walking and running. <i>Human Movement Science</i> , 2015, 39, 200-211.	0.6	17
52	Adding an arch support to a heel lift improves stability and comfort during gait. <i>Gait and Posture</i> , 2017, 58, 94-97.	0.6	17
53	In vivo precision of quantitative shoulder cartilage measurements, and changes after spinal cord injury. <i>Magnetic Resonance in Medicine</i> , 2004, 51, 1026-1030.	1.9	16
54	Reliability and Agreement of 3D Trunk and Lower Extremity Movement Analysis by Means of Inertial Sensor Technology for Unipodal and Bipodal Tasks. <i>Sensors</i> , 2019, 19, 141.	2.1	16

#	ARTICLE	IF	CITATIONS
55	Knee loading patterns in a simulated netball landing task. <i>European Journal of Sport Science</i> , 2013, 13, 475-482.	1.4	15
56	Sprint force-velocity profiles in soccer players: impact of sex and playing level. <i>Sports Biomechanics</i> , 2021, 20, 947-957.	0.8	15
57	Ultrasound-Based Optimal Parameter Estimation Improves Assessment of Calf Muscle-Tendon Interaction During Walking. <i>Annals of Biomedical Engineering</i> , 2020, 48, 722-733.	1.3	15
58	An age-adapted plyometric exercise program improves dynamic strength, jump performance and functional capacity in older men either similarly or more than traditional resistance training. <i>PLoS ONE</i> , 2020, 15, e0237921.	1.1	15
59	Functional movement assessment by means of inertial sensor technology to discriminate between movement behaviour of healthy controls and persons with knee osteoarthritis. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2020, 17, 65.	2.4	15
60	Achilles Subtendon Structure and Behavior as Evidenced From Tendon Imaging and Computational Modeling. <i>Frontiers in Sports and Active Living</i> , 2020, 2, 70.	0.9	14
61	Mechanics of Jazz Shoes and Their Effect on Pointing in Child Dancers. <i>Journal of Applied Biomechanics</i> , 2012, 28, 242-248.	0.3	13
62	The effect of external ankle support on the kinematics and kinetics of the lower limb during a side step cutting task in netballers. <i>BMC Sports Science, Medicine and Rehabilitation</i> , 2014, 6, 42.	0.7	13
63	Gait kinetics in children with clubfeet treated surgically or with the Ponseti method: A meta-analysis. <i>Gait and Posture</i> , 2018, 66, 94-100.	0.6	13
64	Children's rearfoot and midfoot motion while walking in school shoes. <i>Journal of Foot and Ankle Research</i> , 2011, 4, .	0.7	12
65	Age-related differences in rate of power development exceed differences in peak power. <i>Experimental Gerontology</i> , 2018, 101, 95-100.	1.2	12
66	Do Stretch-Shortening Cycles Really Occur in the Medial Gastrocnemius? A Detailed Bilateral Analysis of the Muscle-Tendon Interaction During Jumping. <i>Frontiers in Physiology</i> , 2019, 10, 1504.	1.3	12
67	Information from dynamic length changes improves reliability of static ultrasound fascicle length measurements. <i>PeerJ</i> , 2017, 5, e4164.	0.9	12
68	An optimized design of in-shoe heel lifts reduces plantar pressure of healthy males. <i>Gait and Posture</i> , 2016, 47, 43-47.	0.6	11
69	Multiview 3D Markerless Human Pose Estimation from OpenPose Skeletons. <i>Lecture Notes in Computer Science</i> , 2020, , 166-178.	1.0	11
70	Biofeedback in Partial Weight Bearing: Usability of Two Different Devices from a Patient's and Physical Therapist's Perspective. <i>PLoS ONE</i> , 2016, 11, e0165199.	1.1	11
71	Joint power generation differentiates young and adult sprinters during the transition from block start into acceleration: a cross-sectional study. <i>Sports Biomechanics</i> , 2017, 16, 452-462.	0.8	10
72	The morphology of foot soft tissues is associated with running shoe type in healthy recreational runners. <i>Journal of Science and Medicine in Sport</i> , 2018, 21, 686-690.	0.6	10

#	ARTICLE	IF	CITATIONS
73	Effect of a prehop on the muscle-tendon interaction during vertical jumps. <i>Journal of Applied Physiology</i> , 2018, 124, 1203-1211.	1.2	10
74	Accelerometer Based Data Can Provide a Better Estimate of Cumulative Load During Running Compared to GPS Based Parameters. <i>Frontiers in Sports and Active Living</i> , 2020, 2, 575596.	0.9	10
75	Inertial Sensor-to-Segment Calibration for Accurate 3D Joint Angle Calculation for Use in OpenSim. <i>Sensors</i> , 2022, 22, 3259.	2.1	10
76	Triceps surae muscle force potential and force demand shift with altering stride frequency in running. <i>Scandinavian Journal of Medicine and Science in Sports</i> , 0, , .	1.3	10
77	A quantitative study of humeral cartilage in individuals with spinal cord injury. <i>Spinal Cord</i> , 2008, 46, 129-134.	0.9	9
78	An EMG assessment of Front Row Rugby Union Scrummaging. <i>International Journal of Performance Analysis in Sport</i> , 2014, 14, 225-237.	0.5	9
79	Towards the Monitoring of Functional Status in a Free-Living Environment for People with Hip or Knee Osteoarthritis: Design and Evaluation of the JOLO Blended Care App. <i>Sensors</i> , 2020, 20, 6967.	2.1	9
80	AMIE: Automatic Monitoring of Indoor Exercises. <i>Lecture Notes in Computer Science</i> , 2019, , 424-439.	1.0	9
81	Dose-response effects of forefoot and arch orthotic components on the center of pressure trajectory during running in pronated feet. <i>Gait and Posture</i> , 2022, 92, 212-217.	0.6	9
82	The effect of interventions anticipated to improve plantar intrinsic foot muscle strength on fall-related dynamic function in adults: a systematic review. <i>Journal of Foot and Ankle Research</i> , 2022, 15, 3.	0.7	9
83	Movement Quality Parameters during Gait Assessed by a Single Accelerometer in Subjects with Osteoarthritis and Following Total Joint Arthroplasty. <i>Sensors</i> , 2022, 22, 2955.	2.1	9
84	Treatment of Forefoot Problems in Older People: A Randomized Clinical Trial Comparing Podiatric Treatment With Standardized Shoe Advice. <i>Annals of Family Medicine</i> , 2014, 12, 432-440.	0.9	8
85	Age-related decline in leg-extensor power development in single- versus multi-joint movements. <i>Experimental Gerontology</i> , 2018, 110, 98-104.	1.2	8
86	Reliability of 3D Lower Extremity Movement Analysis by Means of Inertial Sensor Technology during Transitional Tasks. <i>Sensors</i> , 2018, 18, 2638.	2.1	8
87	Influence of heel design on lower extremity biomechanics and comfort perception in overground running. <i>Journal of Sports Sciences</i> , 2021, 39, 232-238.	1.0	8
88	Biofeedback in Partial Weight Bearing: Validity of 3 Different Devices. <i>Journal of Orthopaedic and Sports Physical Therapy</i> , 2016, 46, 993-1001.	1.7	7
89	Muscle-tendon unit length changes differ between young and adult sprinters in the first stance phase of sprint running. <i>Royal Society Open Science</i> , 2018, 5, 180332.	1.1	7
90	Discriminant validity of 3D joint kinematics and centre of mass displacement measured by inertial sensor technology during the unipodal stance task. <i>PLoS ONE</i> , 2020, 15, e0232513.	1.1	7

#	ARTICLE	IF	CITATIONS
91	Quantitative Analysis of Local Changes in Patellar Cartilage in Spinal Cord Injured Subjects. <i>Clinical Orthopaedics and Related Research</i> , 2007, 456, 98-102.	0.7	6
92	Characterisation of the responsive properties of two running-specific prosthetic models. <i>Prosthetics and Orthotics International</i> , 2017, 41, 141-148.	0.5	6
93	Energy cost of running instability evaluated with wearable trunk accelerometry. <i>Journal of Applied Physiology</i> , 2018, 124, 462-472.	1.2	6
94	Habitual foot strike pattern does not affect simulated Triceps Surae muscle metabolic energy consumption during running. <i>Journal of Experimental Biology</i> , 2019, 222, .	0.8	6
95	Effect of acceleration on the rate of power development and neural activity of the leg extensors across the adult life span. <i>European Journal of Applied Physiology</i> , 2019, 119, 781-789.	1.2	6
96	Development and evaluation of a leaflet containing shoe advice: a randomized controlled trial. <i>Family Practice</i> , 2014, 31, 267-272.	0.8	5
97	Multi-segment spine and hip kinematics in asymptomatic individuals during standardized return from forward bending versus functional box lifting. <i>Journal of Electromyography and Kinesiology</i> , 2019, 49, 102352.	0.7	5
98	The Use of a Single Trunk-Mounted Accelerometer to Detect Changes in Center of Mass Motion Linked to Lower-Leg Overuse Injuries: A Prospective Study. <i>Sensors</i> , 2021, 21, 7385.	2.1	5
99	Variation in the location of the shoe sole flexion point influences plantar loading patterns during gait. <i>Journal of Foot and Ankle Research</i> , 2014, 7, 20.	0.7	4
100	Train High Eat Low for Osteoarthritis study (THE LO study): protocol for a randomized controlled trial. <i>Journal of Physiotherapy</i> , 2015, 61, 217.	0.7	4
101	Changes in running kinematics and kinetics after a 12-week running program for beginners. <i>Sports Biomechanics</i> , 2022, 21, 201-211.	0.8	4
102	Joint kinematics alone can distinguish hip or knee osteoarthritis patients from asymptomatic controls with high accuracy. <i>Journal of Orthopaedic Research</i> , 2022, 40, 2229-2239.	1.2	4
103	Intra-assessor reliability and measurement error of ultrasound measures for foot muscle morphology in older adults using a tablet-based ultrasound machine. <i>Journal of Foot and Ankle Research</i> , 2022, 15, 6.	0.7	4
104	Can the Output of a Learned Classification Model Monitor a Person's Functional Recovery Status Post-Total Knee Arthroplasty?. <i>Sensors</i> , 2022, 22, 3698.	2.1	4
105	Process evaluation of podiatric treatment of patients with forefoot pain. <i>Journal of Foot and Ankle Research</i> , 2013, 6, 32.	0.7	3
106	Differences in multi-segmental spine kinematics between patients with different stages of axial spondyloarthritis and healthy controls. <i>Musculoskeletal Science and Practice</i> , 2021, 53, 102368.	0.6	3
107	The effects of foot orthosis and low-dye tape on lower limb joint angles and moments during running in individuals with pes planus. <i>Gait and Posture</i> , 2022, 96, 154-159.	0.6	3
108	The Reliability and Validity of a Three-Camera Foot Image System for Obtaining Foot Anthropometrics. <i>Journal of Applied Biomechanics</i> , 2010, 26, 349-356.	0.3	2

#	ARTICLE	IF	CITATIONS
109	Effect of sports shoes on children's vertical jump performance and midfoot and ankle kinetics. <i>Footwear Science</i> , 2013, 5, S58-S59.	0.8	2
110	Age-related differences in vastus lateralis fascicle behavior during fast accelerative leg extension movements. <i>Scandinavian Journal of Medicine and Science in Sports</i> , 2020, 30, 1878-1887.	1.3	2
111	Inter-segmental coordination of the spine is altered during lifting in patients with ankylosing spondylitis. <i>Medicine (United States)</i> , 2020, 99, e18941.	0.4	2
112	Muscle-tendon properties and functional gait outcomes in clubfoot patients with and without a relapse compared to typically developing children. <i>Gait and Posture</i> , 2022, 93, 47-53.	0.6	2
113	P 074 - A comparison of foot kinematics in children with clubfeet and healthy controls using the Oxford Foot Model. <i>Gait and Posture</i> , 2018, 65, 353-354.	0.6	1
114	Variation of actin filament length in dogs. <i>Journal of Anatomy</i> , 2019, 234, 694-699.	0.9	1
115	The energetic, kinematic and kinetic responses to load carried on the back, on the head and in a doublepack. <i>Ergonomics</i> , 2021, 64, 1191-1204.	1.1	1
116	CONTACT FORCE RECONSTRUCTION ON VIBRATING SURFACES. , 2020, , .		1
117	Impact of Gender and Feature Set on Machine-Learning-Based Prediction of Lower-Limb Overuse Injuries Using a Single Trunk-Mounted Accelerometer. <i>Sensors</i> , 2022, 22, 2860.	2.1	1
118	Injury Prevalence In Australian Professional Golfers. <i>Medicine and Science in Sports and Exercise</i> , 2010, 42, 420-421.	0.2	0
119	Children's functional performance barefoot and in sports shoes. <i>Journal of Foot and Ankle Research</i> , 2012, 5, .	0.7	0
120	Effect of sports shoes on midfoot power generation in children while walking and running. <i>Footwear Science</i> , 2013, 5, S55-S56.	0.8	0
121	Cartilage volume and thickness but not biochemical properties relate to joint loading during gait in healthy controls. <i>Osteoarthritis and Cartilage</i> , 2016, 24, S112.	0.6	0
122	Tibiofemoral joint loading during therapeutic exercises and activities of daily living: Implications for rehabilitation in osteoarthritis and cartilage repair surgery. <i>Osteoarthritis and Cartilage</i> , 2016, 24, S111-S112.	0.6	0
123	Selecting gait modification strategies for patients with knee osteoarthritis. <i>Osteoarthritis and Cartilage</i> , 2016, 24, S112-S113.	0.6	0
124	Effects of habitual running shoe type on foot soft tissues' morphology. <i>Footwear Science</i> , 2017, 9, S63-S64.	0.8	0
125	Assessment of specific muscle tension in dogs through functional electrical stimulation of the gastrocnemius muscle. <i>Research in Veterinary Science</i> , 2017, 113, 33-39.	0.9	0
126	Contact Force Reconstruction from the Lower-Back Accelerations during Walking on Vibrating Surfaces. <i>Vibration</i> , 2021, 4, 205-231.	0.9	0

#	ARTICLE	IF	CITATIONS
127	Evaluation of functional muscle anatomy scalability in the canine hind limb. Journal of Veterinary Medicine Series C: Anatomia Histologia Embryologia, 2021, 50, 637-644.	0.3	0
128	Axial Spondyloarthritis is associated with changes in lumbosacral loading during daily activities. Clinical Biomechanics, 2021, 85, 105347.	0.5	0
129	Functional Effects of Shoes. , 2017, , 1-10.		0
130	Functional Effects of Shoes. , 2018, , 1423-1432.		0
131	Muscle tuning and preferred movement path: do we need a paradigm shift or should we redefine the old? " comment on Nigg et al.. Current Issues in Sport Science, 0, , .	0.1	0
132	Vision-Based Marker-Less Spatiotemporal Gait Analysis by Using a Mobile Platform: Preliminary Validation. Communications in Computer and Information Science, 2019, , 126-141.	0.4	0